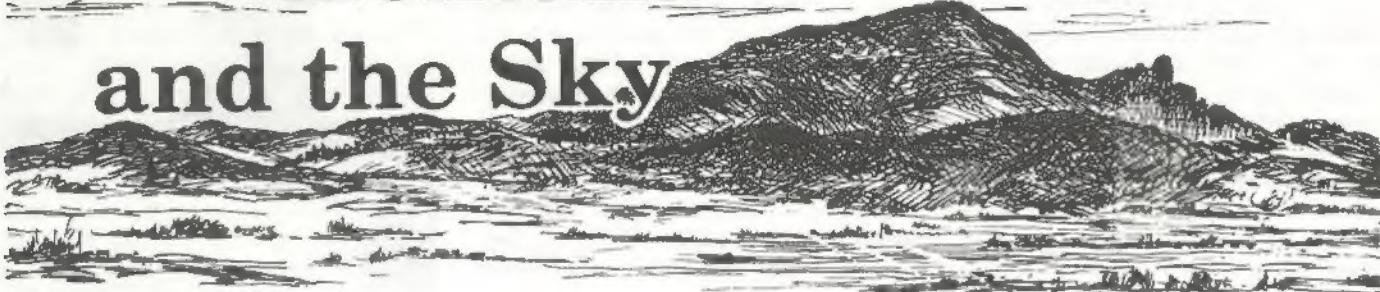


Montana and the Sky



Vol. 36, No 8

MONTANA AERONAUTICS DIVISION

August 1985

HELENA TO OSHKOSH - THE LONG WAY AROUND

"Do you know how to cook shark?"

"How long can you stay awake? Have you been practicing?"

"How much insurance do you carry? Can I be beneficiary?"

"When this is over we'll have to have him checked out!"

These are just a few of the encouraging comments heard around the Aeronautics Division offices in the weeks preceding Mike Ferguson's departure for his "Hawaiian adventure."

After years of thinking and planning, hours of drawing plans and then turning those plans into reality, not to mention the expenditure of a few dollars here and there, Mike's dream finally became a reality. In

his 1953 D-35 Bonanza with Brenda Spivey as co-pilot, he left Helena on July 13, flew to Oakland, left Oakland on July 15 for the trip to Honolulu. The ultimate goal was an attempt to fly solo, non-stop from Honolulu to Oshkosh, Wisconsin, to arrive during the EAA International Fly-In.

Although he has been thinking about and planning for the event for a much longer time, Mike began the actual work on his aircraft during the winter of 1983-84. The major part of the work was done through the winter and spring of 1985.

After careful calculations of amount of fuel required, weight and balance, stress, etc., measurements were taken, molds made, and the fabrication of extra fuel



Mike gives a final waxy rub to one of the tip tanks on his Bonanza the morning of his departure from Helena. He wears a "lei" given to him by a group of his friends.

tanks began. The rear seat was removed as was the right front seat, and fuel tanks were built to fit in those spaces. A factory built auxiliary tank was previously placed behind the rear passenger seat, making a total of five cabin tanks.

Wing tip tanks, capable of carrying 64 gallons each were fabricated from F-102 drop tanks and installed. These were probably the most critical and difficult to fabricate. A friend, Gene Burkland of Great Falls, did the aluminum welding for Mike.



(Continued on page 4)

Administrator's Column

Oshkosh. I just returned from my vacation in time for Martha to let me know it's time to write my administrator's column for this month's newsletter. It's good to be back, even though I have had an interesting experience combined with some business, education, and, last but not least, fun during the past three weeks. As many of you know, I flew my 1953 D-35 classic Bonanza to Honolulu, Hawaii, and then back to Oshkosh, Wisconsin. I attempted a non-stop flight from Honolulu to Oshkosh; however, strong headwinds crossing the ocean resulted in about four additional flying hours and, thus, I ran short on fuel and elected to land in Salt Lake City for additional fuel. The little Bonanza ran like a fine tuned Continental aircraft engine (not a clock), never missing a beat, and the plane flew beautifully although it was understandably slow to accelerate and climb with the fuel load. Even though I did not achieve my goal of a non-stop flight, I still received a world record award during the awards ceremony at Oshkosh. People have asked me if I plan to try it again, and I keep seeing all that water - so at this time I'll reserve my answer. Martha has interviewed me and is writing a more detailed account of my flight elsewhere in this publication. I do wish to thank everyone who helped me prepare for this flight, not only those who helped with the work, donated fuel, and loaned equipment, but also those of you who gave me your moral support and encouragement. THANK YOU ALL!



The Bonanza taxis for a stop at Oshkosh after flying 3,774 nautical miles from Honolulu.
(Photo by Nils Pearson)



Mike gingerly climbs out of the cramped cabin on his arrival in Oshkosh after over 30 hours flying time. Brenda Spivey stands ready to give him a hand.

(Photo by Terry Miles, Superior)



Paul Poberezny, president of EAA, welcomes Mike to Oshkosh.

(Photo by Terry Miles)

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Montanans Win Spokane-Jackpot Race

Larry Whiting, Helena, and Millar Bryce, Plains, came home with two trophies from the Spokane to Jackpot Air Race held June 22-23.

Sponsored by the Spokane Cloudbusters Flying Club and Cactus Pete's Casino, the race covers 487 statute miles in three legs: Spokane to Baker, Oregon; Baker to Gooding, Idaho; and Gooding to Jackpot. Whiting and Bryce made the trip in just under 5 hours flying a 1964 Cessna 150.

There were 23 planes entered in the race ranging from Cessna 150s to Beech Bonanzas and Mooney 231s. The Montana men won a trophy and \$50 for coming the farthest distance to enter the race and another trophy and \$50 for winning the McKay/Cole Memorial Speed Event. This event was for the plane that came the closest to the published manufacturer's book speed.

Whiting attends the Helena Vo-Tech school and will graduate in February with an A & P certificate. He works for Morrison Flying Service. Bryce is a sawmill owner in Plains and serves as a district search coordinator for the Montana Aeronautics Division.

A New Direction After Retirement

Upon his retirement as an electronics expert with Mountain Bell Telephone, Harold Hamm, Helena, pursued his love of aviation and recently graduated from the Helena Vo-Tech center, earning his A & P mechanic's certificates.

Harold is a member and past chairman of the Helena Airport Board and is currently president of the International Northwest Aviation Council.

During his own coursework at the Vo-Tech, Harold often helped with instruction and familiarization with avionics commonly found installed in modern aircraft and antenna systems and how they work. He often followed this instruction with a demonstration flight in his own Cessna 172, utilizing the avionics on board.

Vo-Tech students have greatly benefited from Harold's experience and his willingness to share that experience with others.

Glacier International To Host Thunderbirds

The arrival of the U.S. Air Force Thunderbirds at 10:00 a.m. on Sunday, September 8, will be the kick-off of the air show at Glacier Park International Airport in the Flathead Valley.

Other events, in addition to the Thunderbird demonstration, will include flyovers by a B-52 and a C-5A, aerobatics by the Northern Knights and Team America, static displays of military and private aircraft, a skydiving flag display by members of the Osprey Parachute Club, and a demonstration by the U.S. Forest Service Smokejumpers.

Refreshments, souvenirs, and balloon rides will be available throughout the day. Advanced tickets are available from the Chamber of Commerce and tickets can, of course, also be purchased the day of the show.

A tentative schedule follows:

- 0930 B-52 Flyover
- 1000 Thunderbirds Arrive
- 1100 C-5A Flyover
- 1230 Osprey Sky Dive & Flag Ceremony
- 1215 Northern Knights Aerobatic Show
- 1315 USFS Smokejumper Demonstration
- 1410 Team America Aerobatic Show
- 1440 Thunderbirds Performance

CALENDAR

Sept. 7 - Fly-In at Crystal Lakes Resort. Phone 882-4455 for reservations.

Sept. 8 - Glacier Park International Air Show, Kalispell. Features the Thunderbirds.

Sept. 27 - 29 - Mountain Search Pilot Clinic, Kalispell.

Oct. 4 - 6 - Montana Flying Farmers Convention, Glacier Hotel, Cut Bank.

Oct. 5 - Great Falls to Jackpot Air Race. Call Patti Thompson at 452-8800 or write her at 2824 4th Ave. S., Great Falls.

Oct. 7 - 11 - CFR School, Great Falls. Airport Firefighters welcome. Contact Jerry at Division office.

Oct. 9 - 12 - AOPA Convention and Industry Exhibit, Washington, D.C.

Oct. 10 - 11 - Montana Aeronautics Board Meeting, Helena.

Feb. 14 - 16, 1986 - Flight Instructors Refresher Clinic, Helena.

March 12 - 15, 1986 - Montana Statewide Aviation Conference, Billings.

GPI To Have Temporary Tower

The Great Falls Air Traffic Control will be setting up a temporary tower at Glacier Park International on September 8 for the air show there. Contact them at 118.6 for local control and 121.6 for ground control. Military aircraft can use UHF frequency of 257.6. The temporary tower will be in operation all day Sunday, September 8.



Harold Hamm (center) explains some of the avionics gear on his Cessna to Vo-Tech students Dan Hackens, So. Dak. (left), and Steve Eschler, Helena (far right). Hal Keilman of the Vo-Tech faculty is second from left.

Oshkosh (continued) . . .

Hours and hours were spent designing and installing the fuel system, and more hours went into carefully going over every inch of the airplane. The II Morrow Company out of Salem, Oregon, donated the use of a back-up Loran C, which Mike fitted to an emergency battery pack. He already has his own Loran installed in the airplane.

Morrison Flying Service arranged for the donation of 300 gallons of Exxon Fuel. Aerotronics, Inc. of Great Falls provided Mike with avionic technical assistance and also an emergency hand-held transceiver. Several other friends also helped by loaning life jackets, a life raft, and weighing and waxing the airplane. Mike, a FAA licensed and experienced A & P/IA mechanic, stated that he could not have borne the cost of such an undertaking if he could not have done most of the work himself. Clayton Wilhelm, also an experienced A & P, helped a great deal with items of maintenance.

In addition to all the careful preparations on the aircraft, Mike began a vigorous physical exercise program to bring his own weight down to the amount he had calculated into his overall weight. Every item that went into or on the airplane was carefully considered for necessity and the amount of weight it would add. In addition, Mike conditioned himself to require only about four or five hours of sleep per night.

The trip to Honolulu from Oakland was accomplished in 14 hours 15 minutes with a fuel load of 220 gallons. This portion of the trip also proved valuable as a shake-down for the record attempt to follow.

In addition to spending some time being a tourist, Mike devoted time in Hawaii for last-minute work on his aircraft. Fuel consumption on the trip over had been greater than he anticipated, so he installed a newly reconditioned carburetor borrowed from Gary Woltermann, did some additional tune-up work, and changed to 8 ply tires.

The appearance of a hurricane rushing toward the southeast coast of Hawaii made an on-time departure tenuous, but the storm swept south of the islands; and all was "go." The major concern was the remaining headwinds and some turbulence spawned by the hurricane.



One of the fuel tanks filled the floor of the passenger side. Engineering the fuel system with all its attendant "plumbing" was a major accomplishment and took hours and hours of planning and installation time.

After only three hours of sleep the night before, Mike was finally fueled, and the little Bonanza lifted off Honolulu International Airport at 1710Z (0710 local) on Friday, July 26. Carrying nearly a ton of fuel, the takeoff roll of about 3,000 feet was sluggish; and he rotated at 90 mph and held it in ground effect for acceleration with no success until he raised the gear. The plane then accelerated to 100-105 mph and he began a 200-300 foot per minute climb.

Flying over the Pacific, alone, in the middle of the night, in a small aircraft, can be an interesting experience. There was a considerable amount of work to be done, such as calculating and reporting positions, fuel management, navigating, and flying. Even over the Pacific, though, Mike was never entirely alone. He had conversations with several airline pilots, three of whom own their own airplanes and one of whom he later met at Oshkosh. Mike stated that the airline pilots were a great help in that they relayed all of his position reports to the FAA ATC.

The Bonanza reached land at 1100Z (0400 PDT) on Saturday morning, July 27, having taken 17 hours 50 minutes to cross the Pacific from Honolulu.

With no room to move around in the crowded pilot seat, Mike was able to partially stretch one leg at a time between the rudder pedals. He wore surgical stockings to help keep blood from pooling in his legs.



Two more fuel tanks filled the floor and seat area in back. The life raft rests on top.

Food consisted of high energy, low protein bars and tablets. He had two gallons of water and a thermos of coffee on board. He did not take any kind of pills or drugs to stay awake and drowsiness was never a problem for him.

The headwinds had caused greater than expected fuel consumption, and it became apparent that he would not be able to reach Oshkosh without a fuel stop. The decision had to be made as to where that one stop would be. It must be enroute, have a tower for FAA certification to the National

Aeronautic Association (the organization which certifies records) of the time of arrival and departure, and a supply of the proper type of fuel. Mike landed in Salt Lake City at 1500Z (0900 MDT), spent about 40 minutes on the ground refueling, and took off again.

Touchdown at Oshkosh came at 1914 CDT, just 30 hours, 22 minutes and 27 seconds flying time from Honolulu. While he was disappointed not to have made the trip non-stop, Mike still managed to secure a world record for Class C-1C, Group I, speed over a recognized course. During the Oshkosh EAA awards ceremony he was presented with a tie tack and jacketpatch proclaiming him an "Aviation World Record Holder" as well as a plaque commemorating the event.

After getting his land legs back under him (they felt and performed like rubber for the first day or so back on land), attending an NASAO summer meeting, and enjoying the sights and sounds of Oshkosh, Mike fueled up and (again with Brenda Spivey as co-pilot) headed for Helena on Friday, August 2. He flew non-stop, arriving in Helena in 9 hours 55 minutes - another record setting flight sanctioned by the NAA. To avoid a bank of thunderstorms, he was forced to fly north through the Highline area to get into Helena.

When asked what motivated him to attempt such a flight, Mike stated that he had two reasons: 1) the contagious spirit of adventure and challenge one gets caught up in in belonging to the Experimental Aircraft Association - and more specifically the spirit at Oshkosh; and 2) his personal objection and disgust with a certain publication of national distribution which, in his opinion, has made a fortune printing numerous, unlearned, false, and misleading articles in an attempt to discredit and destroy the creditability of what he feels is the best and longest production general aviation aircraft ever built - the Beechcraft Bonanza. Mike feels that few, if any, 32-year-old airplanes have the structural integrity to withstand such an overstressed condition in a flight such as this and still fly beautifully - in fact few new production airplanes of this class could do it.

Ready to try it again? Mike isn't saying much, but maybe he's seen all the salty water he wants to - for awhile at least!



There was no dignified way to get in or out of the pilot's seat. Here Mike exits on his arrival in Oshkosh.(Photo by Nils Pearson)



The wave to the crowd at Oshkosh was a little wobbly, but the smile was certainly genuine.(Photo by Nils Pearson, Helena)

DIVISION AWARDS FLIGHT SCHOLARSHIPS

Flight scholarships for three Montana young people have been awarded by the Montana Aeronautics Division.

Brenda Watts has just graduated from Flathead High School. She is seventeen and lives with her family in Kalispell. She will spend the summer pursuing her private pilot's license and plans to attend Flathead Valley Community College this fall. After a year there, she hopes to transfer to the University of Montana to study languages.

A senior at Broadwater County High School in Townsend this fall, Paul Austin is involved in sports and enjoys hunting, fishing, and other outdoor activities. He does plan to attend college after graduation, but has yet to decide anything definite.

David Schweigert, Baker, will also be a senior this fall. He is active in athletics in school and devotes his off hours to help-

ing out on the family ranch. He is considering a career in law.

The flight scholarships cover \$250 worth of flight instruction for the recipients at the FBO of their choice.



Paul Austin



Brenda Watts



David Schweigert

TEACHER WORKSHOPS COMPLETED

One hundred twenty Montana school teachers representing schools from all over Montana took part in this year's Aerospace Workshop Program.

Aerospace Workshops for college credit were conducted at six colleges and universities in June. Workshops were held in Kalispell through the University of Montana with Russ Larson as director; in Helena through Carroll College with Pat Johnson and Lanore Johnson as co-directors; in Great Falls through Eastern Montana College with JoAnn Eisenzimer as director; in Glasgow through Northern Montana College with Ron Kologi as director; and in Glendive through Dawson County Community College with Kirsty Bick as director.

The college workshops are one of several aviation/aerospace education programs sponsored by the Montana Aeronautics Division for the purpose of fostering and promoting aviation. The Division is very proud of the achievements of our workshop directors, several of whom are nationally known for what they have done and are doing in this area.

Each of the workshops has a similar course content. Dr. William Horvath, one of two traveling lecturers for NASA Ames Research Center, is the main speaker for a day at each workshop. Among the many aerospace topics Dr. Horvath presents is a "moon rock certification" for educators. Teachers wishing to be certified to borrow actual lunar specimens (a national treasure) are trained in the procedures so that they may borrow moon rocks for use in their schools or communities.

Larry Welch, an outstanding educator from Washington who was teacher of the

year for the state of Washington in 1984, demonstrates and provides plans and information necessary for projects teachers can actually use in the classroom to bring aviation to students in a way that can't help but make learning fun.

Noel Bulloch, U.S. Air Force/CAP Director of Aerospace Education for the Rocky Mountain Region, Lowry Air Force Base, speaks to each workshop on the history of aviation. This provides a good background for what is going on today in the industry. An insight into naval aviation is provided by Dr. Edward Dahy, Naval Education Specialist for Montana.

Information about Montana Aeronautics Division programs is explained by Fred Hasskamp. Fred also talks about the safety of flight and about aviation in Montana and its importance to the state's economy, services rendered to the public, and how to learn to fly. (A number of teachers attending workshops in the past have become pilots.)

Workshop directors bring in other speakers such as FBOs, flight instructors, FAA personnel, National Weather Service personnel, stewardesses, airline pilots, astronomers, and others who are involved in some way in the aviation/aerospace industry.

Orientation flights are a part of each workshop and something that is really looked forward to by participating educators. The vast majority are impressed with small planes after that experience.

For the teachers, the workshops demonstrate a great way to stimulate interest in learning and provide a wealth of ideas, information, and visual aids. For Montana's young people . . . a knowledge

of aviation and aerospace and related careers and, hopefully, a new interest in learning more about the high tech world we live in.

Third Hebbelman Earns License

With his solo on May 22, 1985, on his sixteenth birthday, Curtis Hebbelman, Chinook, became the third generation of the Hebbelman family to fly - and all three generations are still flying.

Curtis was instructed by his dad, John Hebbelman, Jr., owner/operator of the Hebbelman Flying Service in Chinook. The first of the three Hebbelmans is John, Sr., still flying at age 78.

John, Sr., became interested in flying as a young man and took his first lessons in the 1930s. While he made his living at trucking and an electronic business, he kept in touch with flying and often took tickets at barnstorming shows. General hard times, raising a family, and lack of an airplane put his flying ambitions on hold for a number of years, however.

When John, Jr., came along and expressed an interest in learning to fly, he was encouraged by his dad; and when he became licensed at age 16, John, Sr., also finished with the lessons begun long ago and received his license at the same time. They bought an airplane. In the early 1960s John Jr., began Hebbelman Flying Service.

Curtis soloed in a Beech Musketeer A23-24. He still has a couple of years of school ahead of him so future plans are somewhat uncertain.



Curtis Hebbelman is flanked by his grandfather, John, Sr., and his dad, John, Jr., after his solo flight.



Teachers at the workshop in Glasgow build a balloon. Larry Welch, Seattle, one of the workshop speakers, is at far right.

Raptors - Birds of Prey

By Jerry Burrows
Aviation Representative

Well, that's okay, but sure wish they wouldn't build their nest on OUR power lines. And if they built nests like regular birds, that'd be okay too - instead of using the biggest part of a cord of wood!

Our power lines to the Stony Point obstruction beacon just north of Helena appeared to be an ideal homesite for the family of ospreys - large fish-eating hawks. Not just any power pole would do, either - they picked the one with our 2400 volt step-up transformer. The nest covers the transformer, cross arm and power lines.

This pole is only a few miles north of the area burned in last year's large North Hills Fire, and we and the landowner are concerned about the possible fire danger.

The Department of Fish, Wildlife, and Parks recommended that the young ospreys be given a chance to learn to fly and leave the nest (usually around the end of August) before it is removed. As the landowners agreed, we will follow their recommendations.

Since the ospreys will return again next year to build another nest, it will be necessary to provide an auxiliary nesting platform adjoining and slightly higher than the existing transformer pole. Hopefully the Audubon Society or other concerned organization will provide this platform.

In the meantime, our beacon is sending out its nightly red-and-white message, warning those of us who would venture forth in the dark of night of the mountainous terrain. And the ospreys really couldn't care less.



An osprey keeps watch over the nest and a wary eye on the photographer.

TOOL SCHOLARSHIP AWARDED TO VO-TECH GRADUATE



Fred Hasskamp congratulates Victor DeWitt, Columbus, recipient of a \$250 mechanics tool scholarship. Victor graduated in July from the Helena Vo-Tech and has gone to look for employment on the West Coast.

CLASSICS AIR SHOW SUCCESSFUL

By Sandy Palmer, Secretary
Flathead Hangar, MPA

The second annual "Gathering of the Classics" Air Show was considered an unqualified success by those who attended and those who organized it. The air show was held July 20 and 21 at the Kalispell City Airport and hosted by the Flathead Hangar of the MPA.

Approximately 50 planes came to the gathering on Saturday, 15 of which were true classics. Saturday's activities included a barbecue at the airport followed by a serenade over the Valley by the classics.

On Sunday the day's events included a fly-in breakfast, a parade of planes in the air, skywriting, and parachute jumpers. The local Barnstormers Model Airplane Club gave a fantastic demonstration of remote control ingenuity. Airplane, helicopter, and balloon rides were offered.

Followed by the arrival of Lt. Gov. George Turman, the airshow officially began at 1:00 p.m. Lt. Gov. Turman drew for the three prizes which included 1st prize - round trip tickets for 2 to Acapulco, Mexico, via Western Airlines won by Sherrie Frost; 2nd prize - weekend for 2 at Fairmont Hot Springs Resort in British Columbia won by Lucile Parpart; and 3rd prize - weekend lodging and golf for 2 at Crystal Lakes Resort at Fortine won by Cheryl Simmons. All the winners are from Kalispell.

The aerobatic pilots and planes offered excitement for the crowd of about 4,000. The talent in the air included Steve Wolf with his Sampson, Ted Anderson in a Christen Eagle II, Michael Wigen in a Z-250, Tim Whitaker with his Pitts SIS, and Al Newby with his Great Lakes.

It is important to remember that so many members of our Hangar and non-members, plus many local organizations and business people made the community effort a success. Among the organizations and businesses who contributed to the success of the effort were the South Valley Volunteer Fire Department, Search and Rescue, Strand Aviation, Stockhill Aviation, and Hand Held Radio Operators. We are grateful.



Visiting with Lt. Governor George Turman (center) at the "Gathering of the Classics" in Kalispell are Paul Palmer (left), president of the Flathead Hangar, and Jay Billmayer, committee chairman and vice-president of the Western District, MPA.

FAA Considers Decommissioning Three NDBs

The Federal Aviation Administration is considering decommissioning the following NDBs due to estimated costs of repairing and maintaining these VFR-only aids:

1. Blackfoot NDB located 5 miles south of Cut Bank Municipal Airport.
2. Amsterdam NDB located 1 mile northwest of Gallatin Field.
3. Beaverhead NDB located 1.8 miles northeast of Dillon Field.

Interested parties are invited to participate in this study by submitting comments to the FAA office issuing this notice, attention ANM-535. Comments must be relevant to the effect the proposal will have

upon the safe and efficient use of airspace and must be received by September 2, 1985.

Send responses to: ANM-535, Northwest Mountain Region, Federal Aviation Administration, 17900 Pacific Highway South, C-68966, Seattle, WA 98168.



Radio Permit Requirements Changed

The FCC requirement for a Restricted Radiotelephone Operator permit to operate your aircraft radios has been eliminated for U.S. operations.

The permit should be obtained if you are flying in Canada or any other areas outside of U.S.

Application blanks are available at the Aeronautics Division office.

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